Amendments to the Specification

Page 1, replace the section heading at prenumbered line 6 to read as follows:

~~DESCRIPTION~~ DISCUSSION OF THE BACKGROUND

Field of the Invention

Page 2, before, prenumbered line 1, insert

Background of the Invention.

Please replace the paragraph beginning at page 3, prenumbered line 14, with the following rewritten paragraph:

~~The documents (18) and (19)~~ Document (18) "High yield of single-wall carbon nanotubes by arc discharge using Rh-Pt mixed catalysts", Y, Saito, Y. Tani, N. Miyagawa, K. Mitsushima, A. Kabuya, Y. Nishina (Chemical Physics Letters 294 (1998), pages 593-598) and Document (19) "Helical microtubes of graphitic carbon" S. Iijima (Nature, vol. 354, 6 November1991) pages 56 and 58) concern processes for producing carbon nanotubes by PVD processes, with a direct supply of C° carbon atoms by laser ablation or electric arc. Document (18) describes, more precisely, a process for preparing carbon nanotubes using evaporation by arc between two graphite electrodes in helium, at high pressure (50 - 1 520 torrs). Binary mixtures of metals from the platinum group, such as rhodium and platinum, are used as catalysts.

Please replace the paragraph beginning at page 4, line 9, with the following rewritten paragraph:

~~Thus, document (15)~~ Document (15) "Large-Scale Synthesis of Aligned Carbon Nanotubes", W. Z. Li, S.S. Xie, L.X. Qian, B.H. Chang, B.S. Zou, W.Y. Zhou, R.A. Zhao, G. Wang (Science, vol. 274-6, December 1996, pages 1 701- 1703) describes the synthesis of aligned carbon nanotubes using a process based on PECVD (Plasma Enhanced Chemical Vapour Deposition) of carbon from the decomposition of acetylene from a gaseous mixture of acetylene and nitrogen, with the deposition being catalysed by microparticles of iron imprisoned within the porous silica that forms the substrate.

Please replace the paragraph beginning at page 4, line 21, with the following rewritten paragraph:

Document (16) "Growth of Highly oriented Carbon nanotubes by plasma-enhanced hot filament chemical vapour deposition , Z. P. Huang, J. W. Xu, Z. F. Ren, J. H. Wang, M. P. Siegal, P. N. Provencio (Applied Physics Letters, vol. 73, number 26, 28 December1998, pages 3845-3847) also describes the growth of orientated carbon nanotubes on monocrystalline and polycrystalline nickel substrates by the PECVD process, by using a hot filament. The carbon nanotubes have diameters of 10 to 500 nm and a length of 0.1 to 50 micrometers. Acetylene is used as the carbon source and ammonia is used as the diluting gas and for the catalysis.

Please replace the paragraph beginning at page 5, line 1, with the following rewritten paragraph:

~~Document (17)~~ "Electron Field emission from phase pure nanotube films grown in a methane /hydrogen plasma , O. M. Kuttel, O. Groening, Ch. Emmenegger, L. Schlapbuch

(Applied Physics Letters, vol. 73, number 15, 12 October1998, pages 2 113-2 115) concerns the growth of films of carbon nanotubes on silicon substrates by CVD, from a mixture of methane and hydrogen, using a microwave plasma at a substrate temperature of 900 °C to 1 000 °C. Iron or nickel is deposited, beforehand, on the substrate in order to act as a catalytic seed for growing the nanotubes.

Page 5, between lines 11 and 12, insert the title

SUMMARY OF THE INVENTION.

Please replace the paragraph beginning at page 8, line 10, with the following rewritten paragraph:

Furthermore, the ECR electronic cyclotron resonance zone, unlike most ECR plasma processes as described in Document (20) "Electron cyclotron resonance plasma in source for material depositions", M. Delaunay and E. Touchais (Review of Scientific Instruments, vol.. 69, number 6, June 1998, pages 2320-2 24), ~~(20),~~ is located, according to the invention, within the interior of the deposition chamber itself, opposite the substrate, and is thus integrated with it, and there is therefore no separation between the ECR plasma reaction chamber and the deposition chamber.

Please replace the paragraph beginning at page 13, line 6, with the following rewritten paragraph:

As has already be pointed out, the device according to the invention stands out from ECR plasma devices ~~of the prior art~~ as in Document (20) mainly by the fact that there is no separation between the plasma creation chamber, the diffusion, and the deposition chamber, since the ECR zone is integrated within the deposition chamber.

Page 19, between lines 11 and 12, insert the title

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS